

WHAT IS CLAIMED:

- 1 1. A method for use in a mobile station, the method comprising the steps of:
2 attaching to a wireless data network; and
3 performing asymmetric traffic class negotiation with the wireless data network.
- 1 2. The method of claim 1 wherein the performing step includes the steps of:
2 transmitting to the wireless data network a quality of service information element
3 comprising a traffic class indicator that is indicative of requesting asymmetric traffic
4 classes.
- 1 3. The method of claim 1 wherein the performing step includes the steps of:
2 transmitting to the wireless data network a quality of service information element
3 comprising at least two traffic class fields, one for an uplink direction and one for a
4 downlink direction associated with the mobile station.
- 1 4. The method of claim 3 wherein the quality of service information element
2 further comprises at least two residual bit error rate fields, one for the uplink and one for
3 the downlink; as least two service data unit error ratio fields, one for the uplink and one
4 for the downlink; and at least two transfer delay fields, one for the uplink and one for the
5 downlink.
- 1 5. The method of claim 1 further comprising the steps of:
2 receiving data in accordance with a first negotiated traffic class; and
3 transmitting data in accordance with a second negotiated traffic class;
4 wherein the first negotiated traffic class and the second negotiated traffic class are
5 different.
- 1 6. A method for use in a first packet server of a wireless network, the method
2 comprising the steps of:
3 exchanging messages with a second packet server for the purpose of providing at
4 least one service to a mobile station, wherein the exchanging step includes the step of

5 transmitting to the second packet server a message comprising a quality of
6 service information element comprising a field for requesting asymmetric traffic
7 classes for an uplink direction and a downlink direction associated with the mobile
8 station.

1 7. The method of claim 6 wherein the quality of service information element
2 further comprises at least two residual bit error rate fields, one for the uplink and one for
3 the downlink; as least two service data unit error ratio fields, one for the uplink and one
4 for the downlink; and at least two transfer delay fields, one for the uplink and one for the
5 downlink.

1 8. A packet server comprising:
2 a transceiver for exchanging messages with a second packet server for the purpose
3 of providing at least one service to a mobile station; and
4 a processor for causing to be transmitted to the second packet server a message
5 comprising a quality of service information element comprising a field for requesting
6 asymmetric traffic classes for an uplink direction and a downlink direction associated with
7 the mobile station.

1 9. The wireless apparatus of claim 8 wherein the quality of service information
2 element further comprises at least two residual bit error rate fields, one for the uplink and
3 one for the downlink; as least two service data unit error ratio fields, one for the uplink
4 and one for the downlink; and at least two transfer delay fields, one for the uplink and one
5 for the downlink.

1 10. A transmission frame representing data embodied in a wireless transmission
2 signal, the transmission frame comprising:
3 a field for requesting asymmetric traffic classes for an uplink direction and a
4 downlink direction associated with a mobile station;
5 a downlink traffic class field; and
6 an uplink traffic class field.